

Amendments To Specification

Please change the title to --System With Polymer Masking Flux For Fabricating External Contacts On Semiconductor Components--.

In the paragraph on page 3, lines 1-7, please make the following change.

As shown in Figure 1B, during the bonding process, a layer of flux 18 is deposited on the contact pads 12 using a suitable deposition process such as screen printing or pin transfer. The flux 18 chemically attacks surface oxides, such that the molten solder can wet the surfaces to be bonded. Typically, the flux ~~comprises~~ has either a rosin based or a water soluble chemistry.

In the paragraph on page 10, lines 18-30, please make the following change.

The polymer masking flux is formulated to meet environmental standards recognized in the semiconductor industry. In addition, the polymer masking flux is formulated with a viscosity that allows the droplet 42 to have non-flowing characteristics at a selected temperature range, such as room temperature (e.g., 60°F to 100°F or 15.5°C to 37.8 °C). This viscosity allows the polymer masking flux to maintain a desired size and shape, and to remain in a desired area of the substrate 30 over the temperature range. By way of example, the polymer masking flux can have a viscosity at a temperature of about 25 °C. of about 100 to 1500 poise. In this case the viscosity can be measured using a spiral/Malcom viscometer at 25 rpm. [,]

In the paragraph on page 12, lines 16-23, please make the following changes.

The solder ball 44 can be pushed through the droplet 42, and placed on the contact pad 32 using a suitable ball placement mechanism. Such a ball placement mechanism is included in the previously identified ball placement system MS250PLUS manufactured by Motorola. Another suitable ball placement mechanism ~~suitable~~ is disclosed in U.S. Patent No. 6,100,175 to Wood et al. entitled "Method And Apparatus For Attaching Balls To A Substrate".